

U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION II

Emergency and Remedial Response Division Program Support Branch 290 Broadway, 18th Floor New York, New York 10007-1866

MEMORANDUM

TO:

Stephen Cipot - Project Manager

ERRD/NJRB

FROM:

Andy Crossland - Geologist

ERRD/PSB/TST

DATE:

Wednesday, December 8, 1999

SUBJECT: Remedial options for LNAPL at the L.E. Carpenter site, Wharton, New Jersey.

The most likely candidate for amending the remedial system at L.E. Caprenter is the installation of collection trenches. These would be placed strategically through the LNAPL impacted areas and should be able to increase and speed LNAPL recovery in comparison to pumping a network of vertical wells on a monthly basis.

The most effective approach here would include continual removal from the trenches, not periodic collection of LNAPL which is a much more passive. Subsequently, a multiphase treatment approach would be needed, including LNAPL collection and separation, as well as treatment of water which would also be removed.

In addition to the above, it would also be prudent to investigate technologies which would increase LNAPL mobility. Possibilities may include injection of steam or hot water, or some other method of heating the effected area, and a search for environmentally safe surfactants which may be available and suited to the problem. This facet of the approach would require a greater effort in terms of studying the feasibilty of enhancing mobility, as care must be taken not to spread contamination beyond existing boundaries.